

What is claimed is:

- 1 1. A method for forming gear pitches on a gear blank, comprising:
 - 2 providing a tap coupled to and acted upon by an actuator;
 - 3 providing a plurality of blanks, wherein each blank has a surface for
 - 4 threading and each blank is free from actuation, other than forces
 - 5 exerted by the tap;
 - 6 placing the blank surfaces facing each other for engagement with the tap;
 - 7 actuating the tap upon the blank surfaces; and
 - 8 forming threads on the blank surfaces.
- 1 2. The method of claim 1 further comprising providing a holding member for passively
- 2 holding the blanks.
- 1 3. The method of claim 1 further comprising providing coolant to the blanks.
- 1 4. The method of claim 1, wherein the blank surface is a partial-turn surface.
- 1 5. The method of claim 4, wherein the partial-turn surface is a quarter-turn surface.
- 1 6. The method of claim 1, wherein the set of blanks includes blanks being less than 360
- 2 degree turn blanks.
- 1 7. The method of claim 1, wherein the set of blanks includes blanks being quarter-turn or 90
- 2 degree turn blanks.
- 1 8. The method of claim 1, wherein the set of blanks comprises a set of two blanks.
- 1 9. A system for forming gears using a tap comprising:
 - 2 a tap driver;
 - 3 a tap coupled to and driven by the tap driver; and

4 a plurality of gear blanks, wherein each blank has a surface disposed to be
5 engagable by the tap for threading thereon; whereby gears are formed
6 free from a hob and actuation on the gear blanks.

1 10. The system of claim 10 further comprising a holding member wherein the set of blanks is
2 being held for engaging with the tap.